

Inner Planets Chart

	Atmosphere		Surface Features	Internal Structure	Magnetism	Cratering	Unusual Characteristics
	Composition	Temp.					
Mercury	no atm, few stray atoms	427°C to -183°C -slow rot -no atm	-many craters, -no erosion (no atm) -no plate tect (inside cool down)	differentiated very thick lithosphere	basically none, no convection in the solid core	lots: -no atm to burn them up -no erosion or plate tect. to erase	-looks like moon -rotates slowly (2 months)
Venus	Very thick, 95% CO ₂ , sulfuric acid in clouds	467°C everywhere greenhouse effect	rocks hot + mushy, volcanic, high winds	differentiated crust, mantle, core	none, rotates too slowly for convection to exist in core	almost none - thick atm - erosion + tectonics	rotates slowly and backwards (clockwise)
Earth	78% N 21% O 1% other 0.04% CO ₂	15°C	Tectonics, volcanos, weather, oceans, folds	differentiated as it cooled, crust, mantle, core	Yes due to convection in liquid outer core; reverses periodically	Same as Venus plus oceans for meteorites to land in	-life - liquid water
Moon	same as Mercury	127°C to -173°C same reasons Mercury	looks like Mercury	like Mercury, moonquakes due to Earth's gravity	none → solid core	same as Mercury	may have frozen water in craters; orbits Earth
Mars	Very thin, mostly CO ₂	-55°C	Dust storms; Olympus Mons, Valles Marineris largest Volc. ↑ 5x grand canyon -no surface water since atm too thin so H ₂ O evaporates -ice caps (CO ₂ +H ₂ O)	Differentiated but cooled down now so volcanos not active	none, since no convection in basically solid core	some, but most erased	-rusty soil = red -maybe terraform and live there?!